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**SUBJECT**

**N18 – Cold Start Exhaust Rattle Noise**

**MODEL**

R55 Cooper Clubman S, R56/R57 Cooper S and R60 Cooper Countryman S with N18 engine

**SITUATION**

The customer complains about a rattle noise coming from the exhaust/turbocharger area during a cold start. The noise lasts for approximately 20-30 seconds after the engine starts and is audible outside the vehicle.

**INFORMATION**

In order to meet stricter (ULEV2) emissions criteria, the N18 engine turbo wastegate activation strategy has been revised in comparison to Cooper S vehicles equipped with the N14 engine.

In higher ambient temperatures (between 64° and 86° F), the turbocharger wastegate stays fully open during a catalyst warm-up. This condition produces a rattle type of “acoustic feedback” and is created by the rotating wastegate valve face. Valve rotation is required for proper valve seating.

This type of rattle noise is considered a normal operation/characteristic of the N18 turbocharger wastegate system.

**No diagnostic or repair attempts should be conducted for such a condition.**

**WARRANTY INFORMATION**

For information only